United States Environmental Protection Agency: Region 5

Proposed Reopening of Air Pollution Control Title V Permit to Operate
Issued to Veolia ES Technical Solutions, L.L.C., 7 Mobile Avenue, Sauget, Illinois
Permit No. V-IL-1716300103-08-01; Expires October 12, 2013

Docket ID No. U.S. USEPA-R05-OAAR-2012-0649

Comments and Affidavit of Dennis J. Warchol
in Support of Veolia ES Technical Solutions, L.L.C.

I, Dennis J. Warchol, being over the age of 18 and of sound mind, state and depose under oath as follows:

1. I am currently the Environmental, Health & Safety Manager at Veolia ES Technical Solutions, L.L.C. in Sauget, Illinois ("Veolia"). I have over 30 years of experience in the commercial hazardous waste incineration business. I have a degree in Environmental Systems Technology from Southern Illinois University—Edwardsville. I am personally aware and familiar with the information set forth herein.

2. I have reviewed the following documents: Region 5, USEPA, Statement of Basis, Title V Permit to Operate, Permit No. V-IL-1716300103-08-01 (Jan. 2013) (hereinafter "Statement of Basis") and Draft Title V Permit No. V-IL-1716300103-08-01 (Jan. 2013) (hereinafter "Draft Permit").

3. The Xact Multi-Metals CEMS is identified in the Statement of Basis as a system that uses reel-to-reel filter tape sampling technology followed by X-ray fluorescence analysis of metals in the deposit. Statement of Basis at 23. The Statement of Basis represents that this is the only multi-metals CEMS technology currently commercially available. Statement of Basis at 25. Pall Corporation is identified in the Statement of Basis as the marketer for the Xact Multi-Metals CEMS. Statement of Basis at 23.

4. The Statement of Basis discusses the use of a Xact CEMS at the former Eli Lilly incinerator. Eli Lilly's incinerator and Veolia's Unit 3 are not comparable. Most incinerators including the Eli Lilly incinerator employ wet scrubbers as their pollution control equipment or a combination of wet scrubbers and baghouses. The off gases from incinerators using wet scrubbers have similar moisture and temperature ranges. The suppliers of the Xact Multi-Metals CEMS claim that the Xact analyzes the off gas emitted from an incinerator to determine the amount of metals in the emissions stream. Unlike these wet scrubber systems, Veolia operates a dry pollution control system on Units 2, 3 and 4 of its Sauget facility. Dry systems are unique and to my knowledge the only other exclusively dry system in the United States is the Clean Harbors incinerator in Kimball, Nebraska. Veolia's dry pollution control systems operate at much higher moisture and temperature ranges than wet scrubber systems. The Xact Multi-Metals CEMS has never been demonstrated to successfully operate in the

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high moisture and high temperature environment presented by Unit 3.

5. On September 18, 2012, I was among the Veolia representatives that met with USEPA Region 5 to discuss the August 24, 2012, Finding of Violation. As part of these discussions, USEPA stated that it wished for Veolia to install CEMS to monitor stack metals emissions. Veolia stated that it was demonstrating compliance consistent with the methods set forth in the HWC MACT—through Veolia's OPLs, FAP, and CPTs. These were the methods approved in Veolia's Title V permit and the same methods used by every other commercial hazardous waste incinerator in Region V. Veolia expressed its concern that no other commercial hazardous waste incinerator used CEMS to monitor stack metal emissions; therefore, absent competitors installing such equipment, the cost of installing and maintaining the equipment would place Veolia at a competitive disadvantage. Veolia also stated the Xact multi-metals CEMS was a failure at Eli Lilly's Indiana facility and that the Xact was removed after the facility was purchased by Evonik Industries. Veolia told USEPA that it believed that metal CEMS technology could not operate effectively in Veolia's incinerators due to the high temperatures and high moisture content—up to 40%—in Veolia's stacks and the variability of Veolia's feedstream. USEPA's Nathan Frank, Chief of the Air Enforcement Section Branch, dismissed Veolia's concerns by stating: "Someone has to be first."

6. Until it left the business recently, Pall Corporation ("Pall") was the sole marketer of the Xact Multi-Metals CEMs. On January 23, 2013, I spoke to Doug Barth, Pall's Business Development Manager, to collect more information about the Xact Multi-Metals CEMs. Barth claimed that Pall's multi-metals CEMS is a "one-of-a-kind" CEM. Each multi-metals CEMS sample transport system is unique for each installation and must be manufactured and installed based upon factors at the installation location. Barth also alleged that in addition to the Eli Lilly CEMS unit, only four other multi-metals CEMS have been purchased. Each of these CEMS have been purchased by the federal government—three by the Department of the Army and one by the U.S. Army Corps of Engineers. He admitted that all three of these instruments are likely no longer in operation since Pall had not recently sold any of the single use tapes that are necessary to operate the machines. Further, to Barth's knowledge, the three CEMS purchased by the Army had never been certified and had never been used for compliance purposes.

7. Barth has never inspected Veolia's incineration units. During our conversation, Barth stated that Pall could not deliver, install, calibrate and have the Xact Multi-Metals CEMS operational within 180 days. Further, he admitted he had no documentation that demonstrated the Xact Multi-Metals CEMS could effectively operate in Veolia's high moisture -- at times at or above 40 percent -- and high temperature environment. Barth speculated that in order to operate effectively in Veolia's incinerator Unit 3, the Xact Multi-Metals CEMS would, at a minimum, require the addition of dilution air in order to quantitatively dilute the sample. However, this presents a problem in that Veolia's moisture varies greatly in short periods of time and the Xact Multi-Metals CEMS is not designed to detect these variations and immediately adjust the dilution air. Further, although Pall's multi-metals CEMS would require an approved relative accuracy test audit, no such audits are approved by USEPA for multi-metals CEMs.

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8. Since January 23, 2013, I have attempted to contact Barth to discuss issues related to the Xact Multi-Metals CEMS. I left messages on numerous occasions, however, my calls have not been returned. Recently, I received a voicemail from someone who identified himself as being from Cooper Environmental Services. The person stated that Pall Corporation returned the multi-metals CEMS technology to Cooper Environmental Services and Pall had exited the multi-metals CEMS business. (It is my understanding that Cooper originally developed the Xact Multi-Metals CEMs and then assigned Pall a license to market the technology; it is also my understanding that Pall was the only marketer of the technology.) Thus, based on the information provided by Cooper, the marketer of the only multi-metals technology commercially available has now abandoned the technology.

9. Based on Barth's representations and Pall's exit from the market, it is impossible for Veolia to install the multi-metals CEMS technology, much less make it work as set forth in the Draft Permit.

FURTHER AFFIANT SAYETH NOT.

Dennis J. Warchol

SWORN AND SUBSCRIBED
Before me this 26 day
of March, 2013.

Notary Public

OFFICIAL SEAL
CHERYL MILLER
Notary Public - State of Illinois
My Commission Expires Mar 29, 2015

My Commission Expires:
3/29/15

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